REMARKS

In the Office Action dated February 9, 2009, claims 10-12, 14, 17 and 20-25 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 7,020,464 (Bahl) in view of U.S. Patent No. 6,108,300 (Coile).

It is respectfully submitted that the obviousness rejection of claim 10 over Bahl and Coile is erroneous.

To make a determination under 35 U.S.C. § 103, several basic factual inquiries must be performed, including determining the scope and content of the prior art, and ascertaining the differences between the prior art and the claims at issue. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459 (1965). Moreover, as held by the U.S. Supreme Court, it is important to identify a reason that would have prompted a person of ordinary skill in the art to combine reference teachings in the manner that the claimed invention does. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007).

Claim 10 recites a method for maintaining secure network connections, comprising:

- duplicating, at a third network element, a security association associated with a secure network connection between a first network element and a second network element, wherein a lookup of the security association associated with the secure network connection is not dependent on any destination address; and

- in response to detecting failure of the second network element, replacing the second network element with the third network element in the secure network connection with the first network element, wherein the secure network connection between the first network element and the third network element is based on the duplicated security association.

The Office Action cited Bahl as purportedly disclosing duplicating, at a **third** network element, a security association associated with a secure network connection between a **first** network element and a **second** network element. In the obviousness rejection, the Office Action identified the mobile host 70 or 120 of Bahl as constituting the "first network element" of claim 1, the access point 156 of Bahl as constituting the "second network element" of claim 1, and the correspondent host 72 or 122 as constituting the "third network element" of claim 1.

The problem with this mapping of elements in Bahl to the first, second and third network elements of claim 10 is that the secure connection of Bahl is between the mobile host and a correspondent host, and the security association is associated with such secure connection

between the mobile host and the correspondent host. The access point 156 shown in Fig. 3 of Bahl is part of the wireless infrastructure that is used by the mobile host 120 in Fig. 3 to access an infrastructure network such that the mobile host 120 can communicate with the correspondent host 122. There is no concept of a security association between the mobile host 120 and access point 156.

The discussion in Bahl is very clear that the security association described is associated with the secure connection between the mobile host 120 and the correspondent host 122, not between the mobile host 120 and the access point 156. Since there is no security association associated with any connection between the mobile host 120 and the access point 156, then there cannot possibly be any "duplicating" of a security association as recited in claim 10. In other words, the security association that is maintained at the correspondent host in Bahl is **not** a **duplicated** security association, but rather the original security association between the mobile host 120 and the correspondent host 122. This security association is not a duplicate of any other security association, particularly since there is no security association between the mobile host 120 and the access point 156.

This is a first point of error made in the obviousness rejection.

The Office Action conceded that Bahl does not disclose the "replacing" element of claim 10. Instead, the Office Action cited Coile as purportedly disclosing this claimed feature. The Office Action specifically cited Fig. 1 and the Abstract of Coile. Coile refers to transferring a network function from a primary network device to a backup network device when it is detected that the primary network device has failed. However, this has nothing to do with the subject matter of claim 10, which refers to replacing the second network element with a third network element in the secured network connection with the first network element, where the secure network connection between the first network element and the third network element is based on the **duplicated** security association. Nowhere in Coile is there any hint provided of replacing one network element with another network element in a secure network connection and then maintaining the secure network connection based on a duplicated security association.

In view of the foregoing, even if Bahl and Coile could be hypothetically combined, the hypothetical combination of references would not have led to the claimed subject matter.

Moreover, no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Bahl and Coile.

Bahl refers to a change of address of a mobile host as the mobile host moves around. Bahl describes how a secure connection can be maintained between the mobile host and a correspondent host even though the address of the mobile host has changed. This teaching of Bahl has nothing to do with the subject matter of claim 10, which relates to detecting failure of a second network element (to which the first network element has established a secure network connection that is associated with a security association) and replacing the second network element that has failed with a third network element in the secure network connection with the first network element. Maintaining a secure connection in response to a change of address of a mobile host, as taught by Bahl, has nothing to do with detecting failure of the second network element and replacing the second network element with a third network element in the secure network connection with the first network element, as recited in claim 10. Moreover, Coile provides absolutely no hint whatsoever that its failover mechanism would maintain a secure network connection that is based on a **duplicated** security association. In view of the foregoing, it is clear that a person of ordinary skill in the art would have found no reason to combine the teachings of Bahl and Coile to achieve the claimed invention.

Therefore, it is respectfully submitted that the obviousness rejection of claim 10 is in error.

Independent claim 12 recites a method for maintaining secure network connections, comprising:

- configuring a plurality of security gateways such that a lookup of security associations is not dependent on any destination address; and

- sharing a security association among the plurality of security gateways. .

Claim 12 recites sharing a security association among a plurality of security gateways. The Office Action cited security associations 84 and 86 and the IPsec/ISAKMP security associations of Bahl as being shared among a plurality of security gateways (which the Office Action equated to correspondent hosts (or servers 112a and 112b disclosed in Coile)). The security association 84 of Bahl resides in the correspondent host 72, while the security association 86 resides in the mobile host 70. Similarly, the ISAKMP security association 142 in

Fig. 3 of Bahl resides in the mobile host 120, while the ISAKMP security association 146 resides in the correspondent host 122. In each of Fig. 2 and 3 of Bahl, a secure connection associated with a particular security association is maintained between a mobile host and a correspondent host. There is absolutely nothing in Bahl that would even remotely hint at sharing a security association at multiple security gateways. In other words, different security associations in a correspondent host in Bahl would correspond to different secure connections with different mobile hosts. Therefore, there would be no sharing of a security association among a plurality of security gateways.

Coile also makes absolutely no mention of sharing a security association among a plurality of security gateways.

Therefore, even if Bahl and Coile could be hypothetically combined, the hypothetical combination of the references would not have led to the claimed subject matter. Moreover, a person of ordinary skill in the art would not have been prompted to combine the teachings of Bahl and Coil to achieve the subject matter of claim 12, since the concept of sharing a security association among a plurality of security gateways does not exist in Bahl or Coile.

The obviousness rejection of claim 12 is therefore also defective.

Independent claim 22 recites a first security server comprising:

• a transceiver to receive information relating to at least one security association of a secure network connection between a mobile client and a second security server; and

• a processor module to:

  ▪ monitor operation of the second security server;

  ▪ in response to detecting failure of the second security server, send a message to the mobile client that the first security server is taking over the secure network connection; and

  ▪ communicate with the mobile client using the at least one security association over the secure network connection between the first security server and the mobile client.

For reasons similar to those stated above with respect to claim 10, it is respectfully submitted that claim 22 is also non-obvious over Bahl and Coile.

Dependent claims are allowable for at least the same reasons as corresponding independent claims.

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 14-1315 (NRT.0124US).

Respectfully submitted,

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